IV. THERE IS A SINGLE RELEVANT MARKET CONSISTING OF BOTH BROADBAND AND NARROWBAND INTERNET SERVICES

- 78. As we have explained, this merger presents no risk of harm to Internet services competition or consumers even if the relevant market is defined to encompass only broadband service providers. In fact, as we have previously explained, narrowband service providers constrain the prices of broadband Internet services today, and thus any economically sound analysis of market power must consider narrowband providers.
- 79. Furthermore, if both broadband and narrowband Internet services are in the same antitrust market, then the merger obviously does not raise any competitive concerns. As the Commission observed in its *AT&T-TCI* opinion:

Currently, there are a large number of firms providing Internet access services in nearly all geographic markets in the United States, and these markets are quite competitive today. Accordingly, if all Internet access services were included in the market definition, we would conclude that the merger is unlikely to adversely affect the public interest in competitive markets for Internet access services. 97

80. When defining a relevant market, one must bear in mind the appropriate time horizon. During the next two or three years, broadband and narrowband Internet services will undoubtedly be close substitutes in the eyes of millions of consumers. The Internet-based applications that require broadband (such as video streaming) are unlikely to have a major impact on the market within that time frame. At some point in the future, it is possible that broadband Internet services will become sufficiently distinctive that a separate market may indeed emerge.

 $^{^{97}}$ AT&T-TCI ¶ 93 (footnote omitted).

But that possibility should not affect the analysis of the merger because by then the broadband segment will unquestionably be subject to vigorous competition: DSL will be very widely available, other broadband technologies are likely to be prevalent, and AT&T's exclusive arrangements with Excite@Home will have expired.

81. Hausman and Sidak state that broadband Internet access constitutes a separate relevant market. Their conclusion is based on (1) a misinterpretation of the *Horizontal Merger Guidelines* that fails to take into account the dynamic character of the marketplace, (2) a model purporting to apply the *Guidelines*, "hypothetical monopolist" test that rests on dubious and unsupported assumptions, (3) a meaningless price correlation between broadband service charges and the fixed costs of additional telephone lines, and (4) an overstatement of the price differences between broadband and dial-up service,

A. Hausman and Sidak Misconstrue the Horizontal Merger Guidelines

82. It is beyond dispute that for the foreseeable future there will be vigorous competition between broadband and narrowband for the patronage of Internet subscribers. Indeed, the Commission's Cable Service Bureau recently pointed out: "Even the most optimistic estimates predict that narrowband will still be the dominant subscribed form of Internet access by 2005." Therefore, in order for AT&T and other cable companies to make broadband Internet service into a mass market product, they must convince millions of dial-up users to switch. If broadband prices are too high, fewer people will make the switch and more will stay with dial-up service.

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⁹⁸ FCC Cable Services Bureau, *Broadband Today*, at 32 (Oct. 1999).

Thus, narrowband pricing will constrain broadband pricing for many years to come. Consequently, broadband and narrowband Internet services are in the same relevant market.

- Hausman and Sidak reach a different conclusion based on a misreading of the Horizontal Merger Guidelines. In the Guidelines, the Justice Department and the Federal Trade Commission set forth a test for determining whether two competing products (such as broadband and narrowband Internet service) are in the same relevant market. The test asks whether, if there were only a single seller of the first product (i.e., a hypothetical "broadband monopolist"), it "likely would impose at least a 'small but significant and nontransitory' increase in price." One way to answer that question is to consider the volume of sales that would be lost to the second product (narrowband) if the price of the first product went up. "If, in response to the price increase, the reduction in sales of the [first] product would be large enough that a hypothetical monopolist would not find it profitable to impose such an increase in price," then the two products are in the same relevant market. 100
- 84. The "reduction in sales" referred to in the *Horizontal Merger Guidelines* can come about in three ways. If the hypothetical "broadband monopolist" raised its price, then (1) fewer narrowband customers would migrate to broadband, (2) fewer first-time Internet subscribers would choose broadband over narrowband, and (3) a share of broadband customers would

⁹⁹ Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* § 1.11 (1992).

¹⁰⁰ Id.

revert to narrowband. All three of these effects are relevant in determining whether a hypothetical broadband monopolist could profitably raise prices.

85. Hausman and Sidak mistakenly examine only the third effect (the loss of existing customers) and ignore the first two (involving the loss of prospective customers). According to their reading of the Horizontal Merger Guidelines, the Commission is supposed to disregard the effect that higher cable modem prices would have on the migration of customers into broadband, and should only consider the extent to which customers who have already signed up for broadband service would switch back to dial-up in response to a price increase. This myopic viewpoint is wrong from an economic standpoint and it misinterprets the Horizontal Merger Guidelines. Economically, the loss of prospective customers is far more important for a new product, such as broadband Internet service, which is expected to show rapid growth preponderantly at the expense of an established product (narrowband service) that offers many of the same benefits. With such a new product, the profit-maximizing strategy typically involves "penetration pricing" -i.e., setting prices relatively low in order to encourage widespread acceptance of the product. 101 If this strategy is successful, the firm will recoup its investment through a higher level of future demand. The firm's strategy is dynamic, or forward-looking, as opposed to a static strategy of trying to maximize profits from the existing customer base.

For a discussion of penetration pricing, see Joel Dean, "Pricing Pioneering Products," 17 Jnl. Ind. Econ. 165-179 (1979); Robert J. Dolan & Abel P. Jeuland, "Experience Curves and Dynamic Demand Models: Implications for Optimal Pricing Strategies," 45 Jnl. Marketing 52-62 (Winter 1981); Vithala R. Rao, "Pricing Research in Marketing: The State of the Art," 57 Jnl. Business 39-64 (1984).

Horizontal Merger Guidelines. The test, as we noted earlier, is whether a hypothetical monopolist "likely would impose at least a 'small but significant and nontransitory' increase in price." The "likely" behavior of such a firm in a dynamic market is to maximize the net present value of profits by taking into account the effect of its current prices on future growth and demand, rather than simply maximizing short-term profits from its existing customers. The Hausman-Sidak analysis must therefore be rejected because it ignores the loss of prospective customers that would result from a broadband price increase.

B. The Hausman-Sidak Model Demonstrates that AT&T's Prices Are Constrained by Competition

87. In an attempt to apply the *Horizontal Merger Guidelines*, Hausman and Sidak have constructed a model which, in actuality, provides powerful economic evidence that AT&T's cable modem prices are constrained by competition. The model implies that "the vast majority of broadband customers" would be willing to pay significantly more than the price AT&T is now charging, and that virtually none of them would abandon broadband if prices were increased. Based on their model, Hausman and Sidak conclude that a "hypothetical broadband monopolist" could profitably charge significantly more than AT&T is currently charging. This

This formulation of the test – whether the hypothetical monopolist "likely would" raise prices – was one of the changes made in the 1992 *Horizontal Merger Guidelines*. Under the prior version, the test was whether a hypothetical monopolist "could raise prices profitably." Department of Justice, *Merger Guidelines* § II(A), 4 Trade Reg. Rep. (CCH) ¶ 13,102 (1982). However, under the current guidelines, "the analysis is focused on whether consumers or producers 'likely would' take certain actions…." *Horizontal Merger Guidelines* ¶ 0.1.

¹⁰³ Hausman-Sidak Reply ¶ 14.

finding raises a critical question: Why aren't prices higher for AT&T's cable modem service? If the model is valid, it provides further proof that AT&T's prices are held down by dynamic competition with dial-up services and by competition with other broadband technologies (such as DSL).

88 The Hausman-Sidak model rests on a series of faulty assumptions. First. Hausman and Sidak make "the assumption that consumers only consider differences in speed when choosing their ISP."¹⁰⁴ Second, they assume that Internet users would be willing to pay \$29 for each hour of time they could save as the result of high-speed internet service. Hausman and Sidak arrive at this figure by hypothesizing "that the best proxy for the value of one's leisure time is one's wage rate," which, according to a survey, averages \$29 an hour for heavy Internet users. 105 Third, they assume that cable modem service currently costs about \$8 per month more than dial-up service on a fully amortized basis. Based on the foregoing, Hausman and Sidak calculate that a narrowband user would find it advantageous to switch to broadband if he or she could save at least 17 minutes per month due to the faster connection. If the broadband price increases by 5 percent (i.e., the hypothetical price increase suggested by the Horizontal Merger Guidelines), the break-even point would be 23 minutes per month. Because the typical users who is interested in broadband spends over 40 hours a month on line, Hausman and Sidak "believe" that virtually all of them would save "substantially" more than 23 minutes per month with high-speed access. Based on this analysis, Hausman and Sidak conclude that a hypothetical

¹⁰⁴ Hausman-Sidak Reply ¶ 24.

¹⁰⁵ Hausman-Sidak Reply ¶ 26.

broadband monopolist would keep over 95 percent of its customers if it raised prices by 5 percent. With such a high retention rate, a 5 percent price increase would be profitable. 106

- Sidak model is highly questionable. There is no doubt, however, that the *conclusions* of the model are false. According to the model, nearly all heavy Internet users should find broadband preferable to narrowband at today's prices. Indeed, the average AOL subscriber, who spends 23 hours a month on line, would likely save more than 17 minutes a month with a high-speed connection, and therefore, according to the Hausman-Sidak model, should find broadband preferable. If the model were valid, then many millions of customers should be switching to broadband as soon as it becomes available in their service area. That is not the current reality.
- 90. Hausman and Sidak have not offered any empirical support for one of the key assumptions in their model that consumers would be willing to pay an amount equal to their hourly wage for each hour saved by faster Internet access. Professor Varian's study of graduate student users at the University of California implied that the value they placed on time saved due to faster access was about 60 cents per hour far less than the hourly wages they could earn. ¹⁰⁷

To be more precise, Hausman and Sidak state that the "critical share of customers who must switch to render a five-percent price increase unprofitable is 4.8 percent." Hausman-Sidak Reply ¶ 29. The question, in their view, is whether a hypothetical broadband monopolist could retain at least 95.2 percent of its customers if it raised prices by 5 percent above the current level.

¹⁰⁷ Hal R. Varian, "Estimating the Demand for Bandwidth" (Aug. 1999), available at <www.sims.berkeley.edu/~hal/Papers/wtp/wtp.pdf >. We are reluctant to draw any conclusions from the Varian study for the reasons explained in footnote 9 of our initial declaration. Nevertheless, the study at least has the virtue of being based on empirical evidence of actual behavior, unlike the musings of Hausman and Sidak about how they think people would behave.

- 91. In addition, Hausman and Sidak offer no support for the assumption that "consumers only consider differences in speed when choosing their ISP." Hausman and Sidak claim that if consumers consider other factors (such as content), those considerations would unambiguously favor broadband. That is incorrect. Many narrowband ISPs try to differentiate themselves with content and features, such as chat groups, that may not accessible if the consumer switches ISPs. Thus, it cannot be said that every dial-up subscriber contemplating a switch to cable modem service would "only consider differences in speed"; the consumer might well also consider potential differences in content and features.
- 92. For all of these reasons, the Hausman-Sidak model cannot be relied upon to predict the behavior of a hypothetical broadband monopolist. And if it is, it demonstrates that AT&T's pricing is constrained by dynamic and static competition from narrowband and other broadband Internet service providers.

C. The Hausman-Sidak Price Correlation Analysis Does Not Demonstrate that Broadband Is a Separate Market

93. In the AT&T-TCI merger proceeding, Professor Hausman submitted an econometric analysis which purported to show that narrowband and broadband service are in separate markets. We responded in that proceeding by demonstrating that Hausman's analysis was poorly specified and inadequately described. Indeed, much of the description of the regression analyses contradicted Hausman's key conclusions and suggested that broadband and narrowband last mile transport are in the same product market. In his current testimony, Hausman makes no effort

¹⁰⁸ See Ordover-Willig TCI Decl. ¶¶ 13-22.

to defend his earlier work. Instead, he and Sidak have submitted a new econometric analysis, which, they claim, responds to our prior criticisms.

- 94. Hausman and Sidak assert that their analysis provides estimates of "the cross price-elasticities between broadband and narrowband access." Actually, the analysis does not even purport to *measure* elasticities. Elasticity refers to the relationship between changes in the *quantity* of a good demanded and changes in a variable that influences demand. Hausman and Sidak do not include any quantity measurements in their regressions. Instead, they have offered a *price correlation* analysis. But the prices that they have tried to correlate are *not* the prices of broadband and narrowband. Rather, they have attempted to correlate the price of broadband and the "price of second telephone lines [in] different regulatory jurisdictions." In their view, broadband and narrowband Internet service are not in the same product market unless broadband prices are correlated with the price of a second telephone line.
- 95. The use of price correlation analysis to define markets is open to question. Goods that are close enough substitutes to belong in the same relevant market sometimes have low or even negative price correlations. Consequently, when the *Horizontal Merger Guidelines* were revised in 1992, the Department of Justice and the Federal Trade Commission *deleted* the refer-

¹⁰⁹ Hausman-Sidak Reply § I.B.2.

¹¹⁰ Hausman-Sidak Reply ¶ 23.

¹¹¹ See, e.g., Gregory J. Werden & Luke M. Froeb, "Correlation, Causality, and All that Jazz: The Inherent Shortcomings of Price Tests for Antitrust Market Delineation," 8 Rvw. Ind. Org. 329-353 (June 1993); Sheldon Kimmel, "Price Correlation and Market Definition," Economic Analysis Group Discussion Paper, Antitrust Division, U.S. Department of Justice (Sept. 23, 1987).

ence to price correlations as a factor to be considered when defining the relevant market. 112

Furthermore, Hausman and Sidak have not even employed the type of price correlation that is discussed in the literature and in the former *Guidelines* – namely, a correlation of prices *over time*. Instead, they have proposed a novel technique of correlating prices over a *geographic* cross-section. 113

96. Hausman and Sidak's analysis overlooks several reasons why the prices they examined might not be correlated even if broadband and narrowband Internet services are in the same relevant market. First, they have again disregarded the dynamic character of the market. Broadband service is still in the initial launch phase and most consumers are poorly informed about it. Broadband providers face a good deal of uncertainty in determining an optimal pricing policy, particularly inasmuch as their goal is to achieve rapid growth at the expense of narrowband. Under these circumstances, it would not be surprising if different broadband providers facing the same market conditions reached different conclusions about the optimal pricing policy. Nor would it be surprising if a single broadband provider experimented by charging different prices in different areas, not fully related to the price of the competing dial-up services. Similarly, if AT&T observed that dial-up service had different costs in different

Previously, the 1982 guidelines had stated that the Justice Department would give "particular weight" to "[s]imilarities or differences in the price movements of the products over a period of years" when defining the relevant product market. Department of Justice, *Merger Guidelines* § II(A), 4 Trade Reg. Rep. (CCH) ¶ 13,102 (1982). This factor was eliminated in the 1992 *Horizontal Merger Guidelines*.

¹¹³ See George Stigler & Robert Sherman, "The Extent of the Market," Jnl. Law & Econ. 555-85 (Oct. 1985).

Dean has written that "[p]ricing pioneering products is one of the most important and puzzling marketing problems." He points out that "[t]he best way to predict the effect of price

areas (due to variations in local telephone rates), it might decide *not* to vary its own prices in response. By charging relatively uniform prices, it would be able to learn how geographic variations in the *relative* prices of broadband and narrowband affected the demand for its service. Such behavior would be entirely consistent with our conclusion that broadband and narrowband compete in the same product market. Hausman and Sidak have not cited any empirical or theoretical basis to expect a strong correlation of prices when a new product is in an early phase of competition against a more established product.

97. Second, although Hausman and Sidak claim to be looking for correlations in the price of broadband and narrowband, they do not in fact examine the *full* price of either product. For one thing, their price correlation analysis disregards installation charges. This omission is particular inexplicable given that they include installation charges when conducting other analyses. This omission would bias the results if cable companies were more likely to waive all or part of their installation charges in those jurisdictions where dial-up service is cheaper due to lower telephone rates – a possibility they have not investigated. Furthermore, Hausman and Sidak did not examine the full price of dial-up service. In many jurisdictions, the telephone company imposes usage charges (per call or per minute) on local calls, including calls to ISPs. ¹¹⁶ Ignoring these usage charges would bias the results if the variations in fixed monthly charges

on sales volume for a new product is by controlled experiments: offering it at several different prices." Joel Dean, "Pricing Pioneering Products," 17 Jnl. Ind. Econ. 165-179 at 165, 168 (1969).

Specifically, the model described above, in which they attempt to apply the "hypothetical monopolist" test, includes installation charges. See Hausman-Sidak Reply ¶25 & n. 21.

¹¹⁶ See FCC, Reference Book of Rates, Price Indices and Expenditures for Telephone Service 1-2 (June 1999).

across jurisdictions are due, in part, to different policy choices about rate design -- *i.e.*, the use of fixed as opposed to variable charges. It may well be that the wide disparities in fixed monthly charges that Hausman and Sidak observed would diminish if usage charges were factored in. 117

- 98. Third, Hausman and Sidak have not accounted for differences in supply and demand conditions other than those measured by the demographic and income variables included in the alternate versions of their regressions found in their appendix. For example, there is considerable geographic variation in the availability and use of low-cost ISPs. Some areas are well served with many low-cost Internet providers, and public agencies in some communities offer subsidized connections to residents. In other areas, low-cost ISPs are much less prevalent. Any such variations are not taken into account in the analysis of price correlation undertaken by Hausman and Sidak.
- 99. It is not possible for us to carry out a complete critical evaluation of Hausman and Sidak's analysis at this time because they have not been willing to provide the data upon which they relied. Without their data, we cannot determine precisely how they constructed their

Another way to state this point is to observe that narrowband is characterized by "two-part pricing" (a fixed component and a variable component) whereas broadband is not. This is another feature of the environment that is likely to invalidate a simple price correlation analysis. The analysis may fail to detect a correlation between the fixed-price portion of the first product and the total price of the second product, even though the products are close substitutes.

¹¹⁸ See, e.g., <www.coin.missouri.edu/about/how2reg.html>; <w.llion.org/about/services.html>.

¹¹⁹ See Letter from David M. Levy to Stephen G. Bradbury et al. (Nov. 11, 1999) (requesting workpapers) (reproduced as Attachment C to this Declaration); Letter from John P. Frantz to David M. Levy (Nov. 17, 1999) (declining to produce workpapers) (reproduced as Attachment D to this Declaration).

prices, nor can we quantify the extent to which the flaws in their study biased the results. For instance, without their data, we cannot examine how income and demographic data, which are organized by Metropolitan Statistical Areas, were combined with data on cable-access and telephone prices, which are organized by the companies' service areas. Depending on how these data manipulations were performed, biases could have been introduced.

100. One last observation should be made about the analysis of price variations in different areas. Somehow, Gertner and Hausman-Sidak are able to reach the same conclusion regarding the relevant market no matter what the price correlation shows. Gertner declared that "if narrowband and broadband were close substitutes, the price of broadband services would not be expected to vary by region." Hausman and Sidak now say that if they were in the same market, prices *should* vary by region. We conclude that neither correlation is meaningful at this stage of broadband's market history.

D. The Pricing Evidence Confirms that Cable Modem Service Competes with Narrowband

Rubinfeld-Sidak (¶ 25) that broadband and narrowband Internet services must be in separate markets because there are significant differences in prices. We pointed out that it is not unusual to see a range of prices for offerings within a single product market. No one disagrees with that. Indeed, insofar as broadband delivers a superior Internet experience, its price should reflect some of that additional benefit to consumers. Thus, as we pointed out, "what is striking is how *small* a

¹²⁰ Declaration of Robert H. Gertner ¶ 12.

difference there is between the cost of narrowband Internet access and the cost of broadband Internet access." We cited data from the Commission's 706 NOI Report earlier this year indicating that the monthly cost of broadband Internet service via cable modem is exactly the same as the monthly cost of dial-up Internet service, and that the "total first-year costs" were actually lower with the cable modem. 121

- 102. Hausman and Sidak, as well as Gertner, have responded with a barrage of attacks on the Commission's data in an attempt to show that broadband really is more expensive, at least for some customers. They note that some dial-up subscribers pay less than \$20 per month to their ISPs; some do not have a second telephone line; and for some, the "quality-adjusted price" of a second line is different from the actual price. These arguments in no way contradict our central point that cable modem service is currently priced to compete with dial-up service. Indeed, the price comparison is featured prominently in Excite@Home's promotional materials. 122
- Hausman and Sidak present a calculation indicating that, on an amortized basis, the monthly cost of cable modem service is about \$8 higher than the monthly cost of narrowband service. This calculation is biased in at least three ways. First, it compares Excite@Homebased broadband service with the dial-up service of an ISP named Erols, which costs \$11 per month. Because the Excite@Home service includes a substantial amount of content, a more apt

¹²¹ Ordover-Willig MediaOne Decl. ¶¶ 89-90.

¹²² See, e.g., <www.home.com/pricing.html>.

¹²³ Hausman-Sidak Reply ¶ 25.

comparison is with AOL's dial-up service. 124 (It is also a more apt comparison because AOL is, by far, the most popular ISP in the United States.) Had Hausman and Sidak used AOL in their comparison (rather than Erols), the cost of cable modem service would have been almost exactly the same as dial-up service. Second, Hausman and Sidak ignored an entire category of costs associated with dial-up service: the per-call or per-minute usage charges of the local telephone company. Third, their analysis assumes that the cable modem customer must pay a \$150 installation charge (which is amortized at a rate of \$12.50 per month), even though such charges are often waived in whole or in part.

- 104. The Commission's pricing analysis, like our own, included the cost of a second telephone line. Hausman and Sidak suggest that one should look at the "quality-adjusted price" of a second line, which would somehow take into account the fact that dial-up access using a second line has certain disadvantages compared to cable modem access. They note that "a second line is not always 'on,' is subject to congestion, and cannot simultaneously support several broadband applications." Of course, a second line also has advantages: it can be used for telephone calls and faxes. In any case, Hausman and Sidak do not explain how to calculate the "quality-adjusted price" of a second line.
- 105. Although Sidak originally urged the Commission to compare the costs of broadband and narrowband, 126 he and Hausman now argue that such a comparison is meaning-

 $^{^{124}}$ In his original declaration (¶ 12), Gertner acknowledged that the appropriate comparison is between @Home and AOL.

 $^{^{125}}$ Hausman-Sidak Reply ¶ 22.

¹²⁶ Declaration of Daniel L. Rubinfeld and J. Gregory Sidak ¶ 25 (Aug. 1999).

less because "evidence of similar prices between two products – say, a can of Coke and an arcade game – does not imply that the two products are in the same product market." But those products do not compete with each other, they do not have similar attributes, and consumers do not routinely choose between one and the other. Consumers do routinely choose between narrowband and broadband service because the two forms of Internet access provide essentially the same service, although broadband does so in a manner that most consumers find superior. If the prices of similar products are sufficiently close, then there will likely be a large pool of marginal customers – customers whose choice between the two products will be influenced by the relative prices. The fact that AT&T prices its broadband service at a level that is comparable to the price of narrowband service – despite the many advantages of broadband – confirms our central conclusion. In order for AT&T and other cable companies to make broadband Internet service into a mass market product, they must convince millions of dial-up users to switch, and therefore narrowband prices will likely constrain broadband prices for many years to come.

V. THE MERGER OFFERS ENORMOUS PUBLIC INTEREST BENEFITS

106. In our initial declaration, we explained why the proposed merger is likely to offer significant public interest benefits by enabling the merged firm to compete more effectively with the large incumbent local telephone monopolists, each of which currently dominates a service area of vast geographic scope and millions of customers. Both economic theory and the competitive responses of the incumbent suppliers suggest that the merged firm is likely to wrest

¹²⁷ Hausman-Sidak Reply ¶ 23.

¹²⁸ Ordover-Willig MediaOne Decl. ¶¶ 13-31.

customers—and, more importantly, stimulate competitive responses—from today's dominant providers of local telephone services (including local access) at a faster pace than without the merger. Drs. Glenn Hubbard and William Lehr show in their separate declaration that the resulting competitive environment could eliminate more than \$600 million annually in monopoly rents currently paid by consumers. Hausman and Sidak have provided no basis for disputing this important conclusion.

A. The Marketplace Conduct Of GTE And Other Incumbent Monopoly Suppliers Confirms The Competitive Benefits Of The Merger.

ating claimed merger benefits need not rely on predictions of whether the benefits are likely to occur. The competitive benefits projected by AT&T and MediaOne and by economic theory and experience are *already* being confirmed by the marketplace. The mere announcement of the proposed merger and AT&T's aggressive cable-based entry strategy have triggered an avalanche of DSL, broadband and other competitive service offerings by the dominant service providers. We understand that it would have been technologically feasible for the dominant providers to deploy these offerings years ago. Not until the AT&T-TCI and then the AT&T-MediaOne mergers were announced, however, did the incumbent providers make any serious efforts to deploy and promote these services. Likewise, it took AT&T cable-based telephony offerings finally to provoke competitive local telephony responses from the incumbents. 130

¹²⁹ FCC Cable Services Bureau, *Broadband Today*, at 27 (Oct. 1999).

¹³⁰ See Ordover-Willig MediaOne Decl. ¶¶ 20, 50-52; AT&T-MediaOne Reply Comments at 9-14.

108. We are not alone in concluding that the cable companies' push into broadband is largely responsible for the accelerated deployment of DSL by the local telephone monopolies. In its recent report, the Cable Service bureau found:

The ILECs' aggressive deployment of DSL can be attributed in large part to the deployment of cable modem service. Although the ILECs have possessed DSL technology since the late 1980s, they did not offer the service, for concern that it would negatively impact their other lines of business. The deployment of cable modem service, however, spurred the ILECs to offer DSL or risk losing potential subscribers to cable. In various communities where cable modem service becomes available, the ILECs would soon deploy DSL service that was comparable in price and performance to the cable modem offering. Thus, prior to cable modem deployment, the ILECs had little incentive to deploy DSL and the consumer had no choice for high-speed Internet access. ¹³¹

- 109. Indeed, these points were not even controversial when the Bureau held its panel discussions shortly after the AT&T/MediaOne merger was announced: "There was little disagreement among the panelists that cable investment inherently spurs investment in DSL and vice versa." 132
- 110. Chairman Kennard has commented on the same phenomenon. In a speech before the National Association of Telecommunications Officers and Advisors on September 17, 1999, he noted that

on the telephone side, on the DSL side, we are seeing some real interesting growth in DSL service. The telephone companies are starting to deploy it much more aggressively. Between the end of March and the end of June of this year, the number of DSL lines doubled to nearly 200,000 and it is expected to double again by the

¹³¹ FCC Cable Services Bureau, *Broadband Today*, at 27 (Oct. 1999) (footnotes omitted).

¹³² Id. at 32.

end of the year. And this pickup in growth is a function of one thing: competition. The regional Bell companies know that for the first time in the history of this country they are facing a serious, facilities-based competitor in their backyard: the residential marketplace. And that is the cable television industry. And it is the prospect of that competition that is going to really jumpstart broadband deployment in this country. ¹³³

111. Chairman Kennard also offered further examples of the causal link between cable modem service and DSL rollout in a speech before the Northern California Chapter of the Federal Communications Bar on July 20, 1999:

Where cable modem service has been introduced, DSL has followed. For instance, in May 1997, At Home launched service in Phoenix; four months later, US West launched DSL there. That same month, At Home began offering service in San Diego; soon thereafter, Pacific Bell began offering DSL. In June 1998, At Home entered Denver; that same month so did US West. And just last week, Bell Atlantic - anticipating the roll-out of cable Internet access in New York City - announced that it will begin offering DSL service in the Big Apple. The competitive pattern is set, and it works. 134

- 112. Hausman and Sidak nonetheless claim that that the incumbent LECs' stampede of anticipatory competitive responses is unrelated to the merger-specific threat of AT&T's facilities-based bypass of the ILECs' local loops. Hausman/Sidak Reply at 54-58. This claim cannot be reconciled with the incumbent LECs' own conduct in the marketplace.
- 113. Not long after the AT&T/MediaOne merger was announced, Bell Atlantic issued a news release that declared: "Bell Atlantic Doubles Infospeed DSL Deployment, Company to

¹³³ See http://www.fcc.gov/Speeches/Kennard/Spwek931.html (downloaded Dec. 3, 1999).

¹³⁴ See http://www.fcc.gov/Speeches/Kennard/spwek924.html (downloaded Dec. 3, 1999).

Make 17 Million Lines DSL-Capable This Year."¹³⁵ Ameritech also decided, after long delay, to enter the DSL market. ¹³⁶ And, as noted earlier, SBC recently announced its \$6 billion Project Pronto. Thus, whereas the Commission reported in January of this year that the incumbent LECs had announced plans to offer DSL to 20 million homes by the end of 1999, ¹³⁷ their actual deployment is likely to exceed 40 million lines. ¹³⁸

114. The DSL efforts of GTE are no exception. This past July, GTE announced that it planned to offer lower-priced, higher-speed Internet access service, while accelerating DSL deployment in 17 states.¹³⁹ A month later, GTE struck a deal with AOL to offer Internet access via DSL to nearly four million homes in GTE's service area by the end of 1999.¹⁴⁰ On November 9, GTE announced the expansion of its national broadband network to offer high-speed Internet access service across the United States.¹⁴¹ The next day, GTE announced that it would

¹³⁵ News Release, July 28, 1999, <www.ba. com/nr/1999Jul/19990824002.html>.

¹³⁶ David Schobert, "Ameritech takes DSL leap – finally," Telephony (July 26, 1999), 1999 WL 11171924.

¹³⁷ 706 NOI Report ¶ 42.

¹³⁸ See Fred Dawson, "DSL Deployment Hits the Throttle," Multichannel News, at 73 (Oct. 11, 1999), at 73.

News Release, "GTE to offer lower-priced, higher speed Internet access service while accelerating deployment in 17 states," <www.gte.com/AboutGTE/NewsCenter/News/Releases/ADSLBronze.html> (July 22, 1999).

¹⁴⁰ See AT&T-MediaOne Reply Comments at 11 n. 13.

¹⁴¹ See Press Release, "GTE Internetworking expands national broadband network to become a leading broadband DSL service provider. Covad, NorthPoint Communications, and Jato Communications sign agreements to work with GTE Internetworking," Nov. 9, 1999 www.gte.com/AboutGTE/NewsCenter/News/Releases/DSLnetwork.html (downloaded Dec. 2, 1999).

waive for the remainder of 1999 the one-time installation fees for its high-speed Internet access in 17 states—fees that previously ranged from \$99 to \$430 per customer. Today, roughly 60 percent of GTE's local phone customers live or work in areas where GTE DSL service is available—and "the company continues to expand its DSL footprint. This accelerated deployment and marketing of DSL is consistent with GTE's overall competitive strategy: "when competitors have tried to invade our markets, we've responded with aggressive competitive offers." Hausman and Sidak make no mention of these facts.

115. Hausman and Sidak assert that the deployment of DSL by Bell Atlantic, BellSouth, GTE, SBC, and U S WEST "cannot be attributed to the announcement of the AT&T-MediaOne merger" because the "first major DSL deployment" by each company occurred in the second or third quarter of 1998. We do not doubt that the TCI merger announcement, which occurred on June 24, 1998, and which made clear that AT&T was serious about entering local telephony through merger with large cable operators, spurred the first real DSL deployments by

¹⁴² See Press Release, "GTE continues to make it easier for customers to enjoy high-speed Internet access. Waives one-time installation fees for DSL service through the remainder of the year," Nov. 10, 1999 <www.gte.com/AboutGTE/NewsCenter/News/Releases/SLFreeInstall. html> (downloaded Dec. 2, 1999).

¹⁴³ Id

¹⁴⁴ Keynote Remarks of GTE Chairman and CEO Charles R. Lee, Merrill Lynch Global Tele-communications CEO Conference (Mar. 17, 1999), at 3 <www.gte.com/AboutGTE/NewsCenter/Executive/MerrillLynch.html> (downloaded Dec. 2, 1999).

¹⁴⁵ Hausman-Sidak Reply ¶ 81.

See In the Matter of Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Tele-Communications, Inc., Transferor, to AT&T Corp., Transferee, CS Docket No. 98-178 (Feb. 18, 1999) at ¶ 9 n. 33.

the incumbents; until then they had been content to let that technology languish on the back burner. Indeed, by GTE's own admission, the "first major DSL deployment" of SBC, BellSouth, and Bell Atlantic did not occur until two months later—i.e., *after* those RBOCs realized that AT&T was likely to "invade our markets" by offering local telephone and other services over the TCI and MediaOne cable networks.¹⁴⁷

- of *subsequent* deployment and marketing. DSL offerings multiplied after the TCI merger announcement, and have multiplied further since the MediaOne announcement. *See* ¶¶ 27-32, *supra*; AT&T-MediaOne Reply Comments at 10-14. The Commission, like other unbiased observers, has reached the only sensible conclusion: "incumbent LECs' recent moves to offer broadband to residential customers are primarily a reaction to other companies' entry into broadband." *Id.* at 14 n. 26.
- 117. Hausman and Sidak's purported statistical comparison of DSL deployment by ILECs in MediaOne territory before and after MediaOne merger announcement (Hausman-Sidak

Hausman-Sidak Reply at 55 (Table 2). Moreover, the press releases cited by Hausman and Sidak do not support their claim that DSL deployment actually occurred on the indicated dates. The dates cited by Hausman and Sidak are the dates of the rollout *announcements*, which generally preceded actual deployment. In many areas, actual DSL service appears to have been the Internet equivalent of vaporware for some time thereafter. *See* Press Release, "BellSouth Update on Technology Deployment," <www.bellsouthcorp.com/proactive/documents/render/18442.html> (downloaded Dec. 3, 1999); Remarks of Bell Atlantic CEO Charles Lee (Nov. 17, 1998) <www.gte.com/aboutgte/newscenter/executive/warburg.html> (downloaded Dec. 3, 1999); Press Release, "U S WEST to Turn on Nation's First Mass-market, Multi-city Deployment of Ultrafast DSL Internet Service—Boise Area Leads First Wave of 20 Cities to Get Lightning-Fast, Affordable Digital Service by May," www.uswest.com/news/ 050498.html> (downloaded Dec. 3, 1999).

Reply at 55-56 (Table 3)) is deeply flawed and should not be credited. *First*, their statistical analysis is impossible to test or replicate because GTE has refused to produce any underlying workpapers. ¹⁴⁸

- 118. Second, Hausman and Sidak adopt May 1, 1999, as the demarcation date between "pre-announcement" and "post-announcement" deployment of DSL. However, AT&T's efforts to expand its cable footprint—and the attractiveness of MediaOne as a vehicle for large scale facilities-based entry into telephony through merger with a major carrier like AT&T—were widely reported long before the formal announcement of the MediaOne merger on that date. 149
- given metropolitan area as a binary, all-or-nothing condition: they assume that offering DSL service to a single customer in a metropolitan area is equivalent to offering DSL service to every customer in the entire metropolitan area. But DSL is deployed by equipping *individual* central offices. Hausman and Sidak do not examine whether the LECs accelerated the rate at which they equipped central offices within metropolitan areas, nor do they examine whether the LECs stepped up deployment in those central offices that serve MediaOne cable customers. Likewise, Hausman and Sidak fail to analyze the changes over time in the *number* or *percentage* of

¹⁴⁸ See Attachments C and D to this Declaration.

¹⁴⁹ See "Telecom Unbound: How the AT&T-TCI deal will change the entire landscape," Business Week (July 6, 1998) (cover story); "Every Cable Company Is A Cinderella Now," id. at 30 (analyzing impact of AT&T/TCI merger announcement on MediaOne and other cable companies).

¹⁵⁰ See Hausman-Sidak Decl. at 57 n. 147.

households that have been offered DSL service in a particular metropolitan area, the intensity of the ILECs' DSL marketing efforts, or the *prices* at which DSL has been offered. In fact, the available evidence shows that the intensity of these expected pro-competitive responses vastly increased in the wake of AT&T's broad-based commitment to a strategy of offering Internet access and telephony over existing cable networks. Without considering these variables, Hausman and Sidak have no basis for concluding that the MediaOne merger announcement failed to "spur[] DSL deployment in MediaOne territories."

- the same defects. Hausman and Sidak's "formal econometric analysis" (*id.* at 57-58) suffers from the same defects. Hausman and Sidak claim to have performed two regression analyses of a type known as binary logit. One regression purportedly used geographic cross-section data on the deployment of DSL before the announcement of the AT&T/MediaOne merger; the other purportedly used data on deployment after the announcement. The analyses test for an effect of the merger announcement by asking whether DSL rollout is statistically significantly more likely during the post-announcement period in MediaOne areas than in non-MediaOne areas, allegedly after controlling for income and demographic differences among the various areas in the sample. Finding a negative answer to this question, Hausman and Sidak conclude that the announcement of the merger did not spur DSL rollout.
- 121. Again, GTE's refusal to provide any supporting workpapers renders the analysis largely unverifiable. In particular, we cannot test the results for data problems such as multi-collinearity among the independent variables, which would tend to reduce the measured statistical significance of the MediaOne variable. Without the underlying data, we cannot determine if Hausman and Sidak have recorded roll-out dates and locations accurately, or examine in detail

how the demographic and income variables, which are organized by Metropolitan Statistical Areas (MSAs), were integrated with the roll-out data (which should have been organized by corporate service area).

- Sidak have tested the wrong hypothesis. If the ILECs were stimulated to offer DSL generally, then Hausman and Sidak's test would show, as they assert it does, that the likelihood of rollout of DSL would not be significantly greater in MediaOne areas than in non-MediaOne areas either before or after the announcement of the transaction. However, the existence or not of that relationship reveals only whether the announcement affected the *location* of DSL rollout. The more important question, which Hausman and Sidak do not answer, is whether the announcement of the proposed transaction affected the *timing* and *extent* of DSL rollout.
- 123. Hausman and Sidak also overlook the possibility that the announcement of the proposed transaction also spurred the deployment of DSL in regions *not* served by MediaOne. The incumbent LECs serve regions that are not coextensive with MediaOne service areas. Hence, it is possible that the announcement of the merger stimulated the deployment of DSL generally, and that once the decision to deploy was made, the deployment was not confined to MediaOne's service areas. This would be especially likely if there are fixed costs of deployment that could be spread over wider geographic service areas.
- 124. Finally, Hausman and Sidak undermine their own analysis by taking May 1, 1999, as the demarcation date. By using this dividing line, Hausman and Sidak ignore DSL deployments made in anticipation of the MediaOne merger.

- 125. The incentive of ILECs to delay the deployment of DSL service, far from "difficult to justify in theory" (cf. Hausman-Sidak Decl. at 58-59), is straightforward. For residential customers, DSL threatens to divert demand from second and third lines and, to a lesser extent, ISDN. The ILECs' vigorous opposition to sharing the first line to the household with independent providers of DSL service underscores the importance attached by the ILECs to protecting multiple-line revenue from competitive erosion. With respect to businesses, Hausman and Sidak concede that the ILECs "may have been concerned that their introduction of DSL for business customers would divert demand away from T-1 connections." Id. at 59. That the ILECs may be obligated to furnish CLECs with "the necessary inputs to provide T-1 connections" (Hausman-Sidak Decl. at 59) hardly eliminates this incentive. If, from the CLECs' standpoint, DSL service has more profit potential than T-1 service, it would certainly be in the ILECs' interest to delay the deployment of the DSL service that the CLECs are likely to pursue more vigorously.
- 126. Hausman and Sidak cite a press release from GartnerGroup Dataquest for the proposition that growth in the overall demand for bandwidth is a "more likely explanation of the recent growth in DSL use" than is competition from cable modems. The quoted passage, however, concerns only the *demand* for DSL, not its *supply*. The latter subject is covered in the very next sentence, which Hausman and Sidak neglect to quote: "Another factor spurring the

¹⁵¹ See Third Report and Order, In The Matter Of Deployment Of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147 (News Release issued Nov. 18, 1999).

¹⁵² Hausman-Sidak Decl. 59-60 (quoting Press Release, "GartnerGroup's Dataquest Says Need For Higher Bandwidth Connections Spurs xDSL Equipment Growth").

growth of xDSL is the telecommunications providers' need to compete with cable modems, which currently lead xDSL in shipments." ¹⁵³

- B. Economic Theory And Industry Experience Support The Judgments Of AT&T And MediaOne That the Merger Will Greatly Enhance Their Ability To Compete Effectively With Incumbent Service Providers.
- 127. In our initial declaration, we also explained why the synergies that the managements of AT&T and MediaOne expect to attain from combining their complementary assets are consistent with well-established economic theory, and with the Commission's analyses of similar complementarities in the AT&T/TCI merger case. The efforts of AT&T and other competitors to enter local telephone markets through non-facilities-based entry since enactment of the Telecommunications Act of 1996 ("the Act") provide ample confirmation that relying on competitors' facilities is an inferior alternative to ownership of direct physical access to customers' premises. Likewise, the modest success of MediaOne and other cable companies in winning telephone customers from the incumbent carriers underscores the critical importance of an established telephone service reputation and brand, along with first-hand experience in providing and marketing telephone services.
- 128. Economic theory likewise teaches that the merger will allow the combined entity to gain substantial economies of scale, scope and clustering. Economies of scale will result from the expanded footprint and subscriber base of the post-merger cable network. Economies of scope will result from offering telephone, data, and broadband services over MediaOne's cable

Press Release, "GartnerGroup's Dataquest Says Need For Higher Bandwidth Connections Spurs xDSL Equipment Growth") (July 26, 1999) http://gartner3.gartnerweb.com/dq/static/about/press/pr-b9941.html (downloaded Dec. 3, 1999) (emphasis added).

platform at increased penetration levels. Economies of clustering will result from the ability to use common assets or activities to service adjacent or neighboring territories. Without these economies, potential competitors cannot hope to compete effectively with the entrenched incumbents, which serve virtually all customers in concentrated and vast geographic areas.

- 129. Hausman and Sidak assert that we "confuse the benefits of cable-based telephony—the real driver of competition for local services—with the benefits of the merger itself." ¹⁵⁴ It is Hausman and Sidak who sow analytical confusion. The "benefits of cable-based telephony" can be regarded as unrelated to the merger only by ignoring or misstating the importance of each Applicant's complementary assets. We discuss each asset category in turn.
- network reaching millions of households is a facilities-based method of access that AT&T could not duplicate without prohibitive expense. Ordover-Willig MediaOne Decl. ¶¶ 36-37. Hausman and Sidak's rejoinder—"as if AT&T would try to do so" (Hausman-Sidak Reply at 61 n. 159)—misses the point completely. It is precisely because AT&T (and other potential entrants) would not try to duplicate the MediaOne network that the cable network is the only large-scale facilities-based alternative to the ILECs' local networks that is now economic.
- 131. In this regard, Hausman and Sidak's continued insistence that the synergies between AT&T and MediaOne "differ from the synergies between" AT&T and TCI (Hausman-Sidak Reply ¶ 86) is incomprehensible. Hausman and Sidak do not dispute that there is essen-

¹⁵⁴ Hausman-Sidak Reply ¶ 73.

AT&T's physical access to TCI's customers does no good to consumers in MediaOne's service areas who are currently captive to their existing telephone service providers. Stated otherwise, AT&T is *not* a "cable company" in MediaOne territory. *Cf.* Hausman-Sidak Reply ¶ 86.

- 132. Hausman and Sidak's claim that the TCI merger makes it "easier for AT&T to resort to internal growth now by using TCI's expertise to expand into new territories" (id.) is equally unfathomable. Just what network do Hausman and Sidak propose that AT&T use to reach consumers in MediaOne's service area, if not MediaOne's cable network? As Hausman and Sidak effectively concede, a large-scale duplicate network is not a realistic alternative.
- 133. Hausman and Sidak's assertion that the "material gains from adding a second cable firm to AT&T's portfolio are much smaller than the gains from adding the first" because "returns on assets are generally decreasing in identical inputs" (id. at 60-61) is wrong. First, cable networks serving distinct geographic territories are not "identical inputs." Second, given the presence of economies of scale and scope, then, ceteris paribus, "returns on assets" should be in fact increase.
- 134. *MediaOne's Experience In Circuit-Switching Cable Telephony*. Hausman and Sidak deride MediaOne's experience in circuit-switched cable telephony on the asserted ground that "MediaOne's cable telephony penetration is one-third of Cox's rate." Hausman and Sidak neither document this claim nor explain why it would be relevant even if true. The real issue is MediaOne's experience *relative to AT&T's*. Hausman and Sidak do not dispute that

¹⁵⁵ Hausman-Sidak Reply ¶ 87 n. 159.

MediaOne has greater experience in circuit-switched cable telephony, or that such experience is valuable to a new entrant.

- noted, one of the most important assets that AT&T brings to the merger table is its brand name and reputation as a reliable provider. Ordover-Willig MediaOne Decl. ¶¶ 39-40; AT&T-MediaOne Reply Comments at 17. Hausman and Sidak's bald assertion that potential customers would be just as likely to buy service from MediaOne as from AT&T (Hausman/Sidak 51-52) is contradicted by MediaOne's vice president of digital telephone services marketing, who shares the judgment of independent observers that consumers are reluctant to rely on cable companies for a lifeline service as vital as local telephony. McGee MediaOne Decl. ¶ 8. 156
- 136. The "successful" rollout of wireless service by startups such as Omnipoint and Nextel and "cellular resellers" hardly demonstrates that a reputation for reliability is unimportant in offering cable telephony. *Cf.* Hausman-Sidak Reply ¶ 77. Consumers and businesses generally subscribe to wireless service as a supplement to, not a substitute for, basic telephone service. In any event, the lion's share of the wireless market is possessed by companies with well-estab-

¹⁵⁶ Hausman and Sidak's claim that MediaOne "needs [no] assistance" from the AT&T brand "in luring cable telephony customers" because a MediaOne executive experienced "more business than we can handle" in mid-1999, the early stages of MediaOne's telephony rollout (Hausman-Sidak Decl. at 50) is frivolous. Even a small market share can be "more business than we can handle" when a fledgling supplier's initial capacity to provision orders is even smaller. Hausman and Sidak do not dispute the testimony of Nancy McGee, MediaOne's Vice President—Digital Telephone Services Marketing, that MediaOne's penetration of its local telephone markets, a full year after market entry, was still only three percent. McGee MediaOne Decl. ¶ 5.

lished brand names in traditional landline telephony: AT&T, Sprint, GTE, and the Bell Companies.

- 137. Likewise, Hausman and Sidak's claim that subscribers to MediaOne cable telephony services must overcome the "same apprehensions" as do buyers of "local telephone services from an unknown" CLEC (Hausman-Sidak ¶ 77) is hardly a ringing testimonial to the power of the MediaOne brand. CLECs, both unknown and well known, have collectively achieved a market penetration well below one percent. 157
- 138. The supposed "success of other cable providers such as Cox Communications" in no way contradicts the benefit of the AT&T brand. *Cf.* Hausman-Sidak Reply ¶ 78. We understand that Cox's penetration of the local telephony market is only in the high single digits or low double digits, far short of the market penetration that AT&T projects achieving after rollout of telephony and other services over the MediaOne cable network. In any event, the Cox brand is valueless in MediaOne service areas, where Cox has no facilities. AT&T's merger partner is MediaOne, and there can be no question that the combined entity will benefit from AT&T's brand.
- 139. Hausman and Sidak's suggestion that MediaOne could gain the advantages of AT&T's brand simply by entering into an agreement to market its services under the AT&T

¹⁵⁷ See Ordover-Willig MediaOne Decl.¶ 29; accord, Keynote Remarks of GTE Chairman and CEO Charles R. Lee, Merrill Lynch Global Telecommunications CEO Conference (Mar. 17, 1999), at 3 <www.gte.com/AboutGTE/NewsCenter/ Executive/MerrillLynch.html> (downloaded Dec. 2, 1999) ("We've lost less than one-half of one percent of our total access lines to external resellers.").

brand (Hausman-Sidak Reply ¶ 79) ignores the obvious issues of quality control that would ensue. A reputation for service reliability as strong as AT&T's does not arise by accident: we understand that AT&T for decades has allowed its brand to be used only on services whose provision it can closely supervise and control. To rent out the AT&T brand to unaffiliated companies without close operational integration and supervision could jeopardize brand reputation if service quality does not match AT&T's standards. On the other hand, maintaining sufficiently tight integration and oversight to assure service quality raises the same problems we have described in the context of joint ventures.

obtaining interconnection agreements from ILECs. Other valuable assets of AT&T include its experience in competitive markets, including two decades of experience marketing long distance services in competition with MCI, Sprint and hundreds of other aggressive rivals; its costly but invaluable experience in obtaining interconnection and unbundled network elements from ILECs; and its significant experience in the mass market Internet business. Ordover-Willig MediaOne Decl. ¶ 41. Hausman and Sidak's rejoinder that MediaOne has obtained comparable experience by osmosis from its "sister company, TeleWest," is nonsensical. Hausman/Sidak at 50-51. TeleWest is a separate corporate entity, operates in Great Britain, not the United States, and provides telephone service over twisted copper pairs, not fiber cable. TeleWest also has no experience negotiating interconnection agreements with ILECs under United States law, let alone interconnecting local and interexchange service with a cable network. 158

Hausman and Sidak contend that AT&T has achieved a very low market penetration in its test rollout of IP telephony in Fremont, California, thereby refuting the supposed value of AT&T's experience. Hausman-Sidak at 51 n. 131. The facts, as we understand them, support the

leading role in the development of packet switching telephony on the theory that "the technology is too new for AT&T to have any lead." This statement merely betrays the witnesses unfamiliarity with the field. AT&T Laboratories includes a staff of numerous professional researchers working on IP telephony, including professionals devoted specifically to the development of IP telephony over cable. With expertise in both telephony and cable, these researchers are at the forefront of developing open cable IP telephony standards. One researcher, for example, was the lead drafter of the Distributed Call Signaling portion of the upcoming Packet Cable specifications. Similarly, another member of AT&T Labs had a major role in the development of the voice coding ("CODEC") portion of the specifications to help ensure that packetized telephony protocols would allow adequate voice quality. Engineers at AT&T Labs have also developed

opposite conclusion. AT&T began offering IP telephony services to its cable subscribers in Fremont on May 12, 1999—only seven months ago. See John Healey and Deborah Kong, AT&T Offering Some Freemont Residents Phone-Cable Packages (May 13, 1999) http://www.mercurycenter.com/svtech/news/indepth/docs/tci051399.htm>. AT&T restricted its marketing efforts to cold calls to potential customers, apparently to ensure that each customer fully understood the product before signing up. See Brian Quinton, Next Stop: Chicago, AT&T Cable Phone Heads To Windy City (July 29, 1999) http://www.internettelephony.com/asp/ItemDisplay.asp?ItemID=7012. Even this modest marketing strategy achieved a sign-up rate of 18 to 20 percent. Id. Moreover, almost half of these customers ordered multiple phone lines, while only 20% of the incumbent local exchange carrier's customers purchase a second phone line. Id. AT&T has concluded that it is "making excellent progress in its first telephony pilot community in Fremont California." See AT&T Corp. Third Quarter 10-Q Report at 25 (October 1999).

¹⁵⁹ Hausman-Sidak Reply ¶ 87 n. 159.

For example, AT&T is a member of the International Multimedia Teleconferencing Consortium, which met last March to discuss further improvements in general specifications of the CODEC standards. See Morris Edwards, Growing pains, Netcom Update http://www.nelsonpub.com/cn/stories/articles/c9801edwa.htm. See also International Multimedia Teleconferencing Consortium Home Page http://www.imtc.org/otherstan.htm; Sam Gronner & Mike Jacobs, Codec Chip Eases Analog Line Card Design, Cuts System Costs, AT&T Press Release (April 24, 1995) ("Analog line cards for telecom equipment have just become easier and

the "LightWire" architecture, which should improve cable performance and reduce recurring expenses. AT&T is already implementing this architecture on a trial basis in Salt Lake City. 161

C. Joint Ventures And Other Contractual Arrangements Are Unlikely To Provide A Timely And Effective Alternative To The Proposed Merger.

gies through joint venture arrangements that fall short of a merger—a claim for which they offer no support—conflicts with both economic theory and experience. Analysis of the behavior of firms in a variety of markets teaches that a joint venture contract will generally prove an inferior substitute for a full equity merger when the proposed enterprise requires a large initial sunk investment by one or more of the parties (as well as the sharing of facilities by the venture and one of the parties to the venture), and when the ultimate risks and rewards of the enterprise are highly uncertain. Providing new services over cable requires large sunk investments on both

less expensive to design thanks to a new AT&T Microelectronics single-chip device that performs analog-to-digital conversion for four voice channels at a time from single +5 volt power supply. . . . AT&T has developed a superior network load management capability by incorporating a variable time slot feature into the T7504 chip.") http://www.att.com/press/0495/950424.mea.html>

¹⁶¹ See Sally O. Thiel, C-Cor.net and SVCI Announce Initial Deliveries of Both Mini and Multiplexing Nodes For AT&T's LightWireTM Field Trial in Salt Lake City (Sept. 8, 1999) http://corporate.c-cor.net/press/newsrl/1999/090899.htm; Fred Dawson, Network May Justify AT&T's Faith In Cable (July 14, 1999) (AT&T's new technology could decrease costs by increasing "the usable bandwidth available over the coax from the current ceiling of about 750 megahertz to at least 1 gigahertz - a gain of more than 30 percent. The approach reduces the homes served by the coax to between 50 and 100, vs. the 600 or so now served from fiber termination points.") http://www.zdnet.com/intweek/stories/news/0,4164,2292775,00.html; Chuck Moozakis, Cable Providers Set Sites on the Enterprise, InternetWeek Online (Sep. 30, 1999) http://www.internetwk.com/lead/lead093099.htm. Moreover, AT&T already is providing non-cable IP telephony through its Connect 'n Save™ offer. Through this service, AT&T has gained experience in routing packetized voice through its network. This experience will also help improve the eventual transition of MediaOne's local telephony from a circuit-switched offering to a packet-based offering.

sides, in a commercial environment as dynamic and unsettled as any we have yet witnessed. Hence, there is every reason to credit the testimony of Terry Wingfield, the leader of AT&T's efforts to negotiate telephony joint ventures with existing cable companies, and Doug Holmes, MediaOne's strategic planning head, that such contractual arrangements are difficult to achieve, and unlikely to provide the full consumer benefits of integration. Ordover-Willig MediaOne Decl. ¶¶ 21, 53-65.

- Hausman and Sidak assert that these difficulties could be avoided by entering into a "simple" interconnection agreement "to use AT&T's transport facilities." Hausman-Sidak Reply ¶ 88. A "simple interconnection price that was a function of the total traffic terminated would incorporate all possible variation in outcomes," they insist (id.). Hausman and Sidak do not explain how such a transaction would work, and its impracticality is obvious. A contract limited to the use of AT&T's transport facilities would not give MediaOne the use of AT&T's brand, marketing experience, experience in obtaining interconnection and access, or expertise in packet-switching telephony. Id. at ¶¶ 87-88. AT&T, for its part, would gain neither the use of MediaOne's cable network nor its experience in cable telephony. In short, the "simple" agreement that Hausman and Sidak propose is simple because it does not even pretend to cover most of the ingredients needed for successful large-scale entry into facilities-based telephony.
- by the proposed merger obviously would render the "simple interconnection price" proposed by Hausman and Sidak unworkable. As we have previously explained, the relative strength of demand for each service potentially offered over cable, the bandwidth, capital investment, and operating costs needed to supply each service, the intensity of competition for each service, and

the revenue generated by each service are all unknown in advance. All of these factors would affect the division of net revenue that AT&T and MediaOne would demand, if unaffiliated, for participating in a joint venture that involved the same assets and operational control as the proposed merger.

- 145. In evaluating the potential benefits of a proposed merger, the Commission should base its analysis on realistic alternatives to the proposed transactions, not on alternatives that are only theoretically conceivable, but unproven in practice. The simplistic "agreement" hypothesized by Hausman and Sidak does not begin to satisfy this standard.
- Parte Reply at 37-38. The AT&T-BT joint venture involved the transfer of all international assets and operations to a newly created subsidiary jointly owned by both parents. The result of the transaction was complete integration of the two parents' international facilities. This transaction obviously was far closer in substance to the merger proposed here than to the simplistic arms-length interconnection agreement proposed by Hausman and Sidak.

¹⁶² See, e.g., Federal Trade Commission and U.S. Department of Justice, Antitrust Guidelines for Collaborations Among Competitors (draft issued Oct. 1, 1999) at ¶ 3.36(b) (in determining whether the efficiencies offered by a proposed collaboration could be achieved by less restrictive alternatives, the FTC and the Department of Justice "consider only alternatives that are practical in the business situation faced by the participants; the Agencies do not search for a theoretically less restrictive alternative that is not realistic given business realities.").

- D. The Purchase Premium Offered By AT&T For MediaOne Confirms That AT&T Management Will Move Aggressively To Deploy Telephone And Other New Services Over The MediaOne Cable Network.
- 147. As the Commission recognized earlier this year in approving the AT&T-TCI merger, the merging parties' commitment of their corporate assets to the merger (and, in AT&T's case, the commitment of tens of billions of dollars of funds), gives AT&T and MediaOne every incentive to make the merger succeed. This commitment of resources also represents a credible judgment by AT&T's management that the merger is likely to yield significant competitive entry into local telephony and other product markets over the MediaOne network, for the purchase premium paid by AT&T is unlikely to be recovered unless this competitive entry succeeds. Ordover-Willig MediaOne Decl. ¶ 17.
- Hausman and Sidak, while conceding that the premium paid by AT&T over the cable broadcasting-only value of MediaOne is "enormous," asserts that that the existence of this purchase premium equally supports the "hypothesis" that the merger will generate monopoly rents. Hausman/Sidak at 45-46. This alternative hypothesis, however, collapses in the face of the overwhelming evidence that the merged entity will not possess monopoly power in any relevant market. See ¶¶ 18-105, above; Ordover-Willig MediaOne Decl. ¶¶ 81-135.
- Hausman and Sidak's attempt to equate our position with the "business judgment rule in corporate law" (Hausman-Sidak Reply Decl. at 46-48) is an attack on a straw man. Neither the Applicants nor we are asking the Commission to accept on faith the Applicants' judgment that the merger will benefit their shareholders, let alone the public generally. Our point is simply that the commitment of tens of billions of shareholder dollars on a transaction that is likely to be profitable only if the surviving firm succeeds in providing telephony and other

new services over the MediaOne network on a large scale is significant and credible evidence that AT&T and MediaOne are likely to carry through their plan to offer these services over MediaOne network. 163

The credibility of this evidence is only heightened by the aggressive opposition of GTE and other incumbent monopolists to the proposed merger, and by their rush to offer DSL and other competing services in anticipation of AT&T's entry. If GTE and other ILECs genuinely believed that the merger was unlikely to increase competition for local telephony, their reaction should be private rejoicing at AT&T's waste of corporate assets, not active opposition to the transaction.

The supposed contradiction between our position here and AT&T's request for the imposition of conditions in the SBC/Ameritech merger is an invention of Hausman and Sidak. Hausman-Sidak Decl. at 48-49 ¶ 71. As AT&T and MediaOne have noted, out-of-market entry is peripheral to the business plan of SBC and Ameritech, and they obviously proposed it only as a sop to help win Commission approval of the underlying transaction. SBC has no incentive to engage in out-of-market entry unless required to do so: the commercial benefits it expects to gain from the merger do not depend on out-of-market entry outside the Ameritech region. By contrast, AT&T and MediaOne's planned expansion into cable telephony and Internet services is the linchpin of their post-merger business plan, and is critical to the commercial success of the merger. AT&T-MediaOne Reply Commentst at 24-25 n. 55.

VERIFICATION

I, Janusz A. Ordover, declare under penalty of perjury that the foregoing is true and correct. Executed on December 2, 1999.

Janusz A. Ordover

VERIFICATION

I, Robert D. Willig, declare under penalty of perjury that the foregoing is true and correct.

Executed on December £, 1999.

Robert D. Willig